

STOCKING FARM FISH PONDS

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Increasing numbers of rural landowners who have a pond or who plan to build one consider stocking fish. This leaflet furnishes general information to help determine whether to stock and what to stock; and it outlines procedures for accomplishing the practice. Recommendations are based on a decade of Cornell University research which, since 1952, has been done in cooperation with the New York State Conservation Department.

GENERAL CONSIDERATIONS

It is not necessary to stock fish to maintain or improve the quality of farm pond water. For practical purposes, presence or absence of fish has no bearing on the suitability of pond water for typical farm or home uses.

Ponds with a maximum depth of less than 6 feet usually should not be stocked. Under these conditions, risk of summer and winter fish kills from oxygen shortage is increased greatly. The presence of a continuous and unusually heavy spring water supply would be an exception.

The individual situation of the pond owner and his family should be considered. Preferences for certain kinds of fishing, time available for fishing, and time available for pond management should help determine the kind of fish to stock.

SUGGESTED SPECIES AND SPECIES COMBINATIONS

For Cold-Water Ponds

Increasing numbers of ponds in which summer water temperatures in the deepest part of the pond do not exceed 74°F., are being stocked with brook (speckled) trout or rainbow trout. Ponds with continuous spring water supply and 8 to 10 feet minimum depth are best suited for trout, but even deep run-off supplied ponds located over 1,000 feet elevation often will prove satisfactory. The Cornell extension bulletin on trout pond management gives detailed information helpful in determining whether to stock trout and describes a simple technique for measuring summer water temperatures at the pond bottom.

Both trout species, stocked in the fall as 5-inch or 6-inch fingerlings, will average 8 inches in length the following spring, and 10 inches length and 8 ounces weight the first fall after stocking. At the end of the second year, length averages 12.8 inches and weight 14 ounces.

Natural reproduction of trout in farm ponds is rare. This fact, together with a high natural death rate averaging 60 percent to 70 percent each year, determines the simple management scheme of fishing heavily 2 or 3 years, then restocking.

Brook trout are more easily caught than rainbows and some fishermen claim have superior flavor. Rainbows are noted for their fighting qualities. Pond trout fishing is best in fall, winter, and spring. Owner satisfaction has been high.

If you want trout but have some question about the suitability of your pond, try them. It is the only way to be sure. But try trout first; if they fail, then stocking something else is a simple matter.

Stock trout alone. Add no other fish, and do not stock them if other fish already are present.

Do not stock brown trout. They have proved unsatisfactory in ponds.

For Warm-Water Ponds

A combination of largemouth bass and bluegill sunfish has been stocked widely in New York ponds in which summer water temperatures in the deepest part of the pond usually exceed 74°F. The largemouth has good sporting qualities, and bluegills, added as a forage fish for the bass, have superb table quality and are an excellent sport fish on light tackle. A year following stocking as fingerlings, bluegills average 5 inches in length; bass 8 inches. Two years after stocking, bluegills average 6.5 inches; bass 10.4 inches.

Owner satisfaction from stocking bass and bluegills has been variable. Reproduction of bass has been unpredictable, and bluegills have overpopulated many ponds with the result that both species have been stunted. Good management demands very heavy fishing or trapping of bluegills, and a greater investment of time than for other species. The combination has been most successful in ponds of one-half acre or larger. Most difficulty has been encountered in ponds under one-third acre.

Fishing is best during summer months. The first summer after stocking, bluegills are the only harvestable fish. Bass may be taken the second summer if they have spawned successfully.

A combination of largemouth bass and golden shiners, a common minnow of warm waters, appears a promising alternative for warm water ponds, especially where light fishing pressure is anticipated and owners value bass fishing highly. Golden shiners serve only as forage for the bass. In this combination, growth of bass is considerably greater than when bluegills are the companion species. After one year, bass stocked with shiners average one-third heavier; 50 percent

heavier after two years, reaching nearly 1 pound at that time. In warm water ponds of one-quarter to one-half acre, the bass-shiner combination is considered more applicable than bass-bluegills. As with bass-bluegills, no bass should be harvested until they have spawned, usually in the second summer.

Do not add other fish to the recommended warm water combinations. Experimenting with a mixture of warm water fish—bullheads, sunfish, rockbass, perch—often results in the most hardy species dominating, then becoming overcrowded and stunted. Pond stocking still is being studied. New suggestions will be publicized.

STOCKING RECOMMENDATIONS

Species	Number per acre of water surface	Size of fish	Season to stock	Restocking
TROUT				
Brook (Speckled) or Rainbow	300 to 600* fall fingerlings	5 to 6 inches	fall—after mid-Sept.	fall fingerlings only, same rate, every 2nd or 3rd year
BASS-BLUEGILL				
Bass	100 fingerlings	1 to 2 inches	summer	none necessary
Bluegill	500 to 1,000 fingerlings	$\frac{1}{2}$ to 1 inch	summer, same year, or preferably, one year after bass	
BASS-SHINER				
Bass	100 fingerlings	1 to 2 inches	summer	none necessary
Golden Shiners	200 to 400 adult	3 to 4 inches	summer, same year as bass	

*Lowest trout stocking rates recommended for ponds in areas of infertile low-lime soils.

SOURCES OF FISH

Federal government hatcheries, maintained by the United States Fish and Wildlife Service, provide fingerling largemouth bass, bluegill sunfish, brook trout and rainbow trout for stocking farm ponds.

Ponds qualified for federal stocking must not be smaller than one-quarter acre in surface area nor larger than five acres. They cannot be affiliated with a commercial enterprise such as a resort, motel or recreation area, and only artificially constructed ponds without established fish populations are eligible.

There is no charge for fish from federal hatcheries, and receiving them does not obligate the pond owner to open his pond to public fishing.

Application for fish from federal hatcheries is made by submitting Form 3-1688, in duplicate, to the Regional Director, United States Fish and Wildlife Service, Bureau of Sport Fisheries, 59 Temple Place, Boston 11, Massachusetts. Application forms may be obtained from your county Soil Conservation Service or Extension Service office, or by writing the Regional Director, United States Fish and Wildlife Service, at the address given above.

The Fish and Wildlife Service must receive your application by February 1 to furnish fish during the same calendar year.

The Fish and Wildlife Service will restock trout ponds, but no more frequently than every two years. Heavy demand for trout may cause them to lengthen this interval. Priority is given to initial stocking of new ponds. Demand for trout also has caused them to limit the trout stocking rate to 300 fall fingerlings per acre.

Commercial fish hatcheries in New York and nearby states market trout and warm water species suitable for stocking farm ponds.

The pond owner must make direct contact with the hatchery. A list of commercial fish hatcheries in the Northeast, showing species available, may be obtained without charge from the New York State Conservation Department, State Campus, Albany 1.

Bait fish dealers in your community are the source of adult golden shiners for the bass-shiner combination. Federal hatcheries do not supply them, but will furnish bass for this type of stocking.

New York State Conservation Department hatcheries do not supply fish for farm ponds.

AN IMPORTANT LEGAL CONSIDERATION

State Conservation Law requires an individual or organization to obtain a permit *before* stocking a pond.

If you apply for and receive fish from the United States Fish and Wildlife Service, this permit is taken care of for you, but if you purchase fish from a commercial hatchery, bait dealer, or transfer them from another pond, the law requires that you obtain this permit *before* stocking.

Applications for stocking permits are available from your State District Fisheries Office, or from the New York State Conservation Department, Bureau of Fish, State Campus, Albany 1. It is a simple form, there is no charge, and your cooperation will help insure that no fish will be stocked in drainage areas where they might impair the quality of present fishing.

MAY 1960



Cooperative Extension Service, New York State College of Agriculture at Cornell University and the U. S. Department of Agriculture cooperating. In furtherance of Acts of Congress May 8, June 30, 1914. M. C. Bond, Director of Extension, Ithaca, New York.

